

## **Healthy Kids Act – Nutrition Advisory Panel – Recommendations 2008**

Preface: 2008 Iowa Acts, Senate File 2425, Division XI, created the “Healthy Kids Act” calling for adoption of rules establishing nutritional content standards for foods and beverages sold or provided on school grounds for any school district or accredited nonpublic school during the school day exclusive of food provided by any Federal school food program...and exclusive of foods sold for fundraising purposes and foods and beverages sold at concession stands. Further, the Act called for the Department of Education to convene, in collaboration with the Department of Public Health, a nutrition advisory panel to review research in pediatric nutrition conducted in compliance with accepted scientific methods by recognized professional organizations and agencies including but not limited to the Institute of Medicine. The standards shall be consistent with the Dietary Guidelines for Americans issued by the United States Department of Agriculture Food and Nutrition Service. This report constitutes the recommendations from the Nutrition Advisory Panel.

### **Statement of Need**

Data from NHANES III show that nationally 37% of youth (6-11 years old) are at-risk for overweight and 19% are overweight (Ogden et al., 2006). In Iowa, over 40% of low income children entering Iowa’s rural kindergartens in 2005 were overweight (Iowa Department of Public Health, 2005). Iowans Fit for Life, an Iowa Department of Public Health program funded by the Centers for Disease Control and Prevention, with the assistance of Wellmark, collected data suggesting that 18% of 5<sup>th</sup> graders are at-risk for overweight (BMI-for-age  $\geq$  85%) and 21% are overweight (BMI-for-age  $\geq$  95%) (unpublished data). The prevalence of overweight among Iowa’s youth, both very young and pre-adolescent, appears to outpace national rates and places our youth at increased risk for a host of chronic diseases.

Childhood obesity has been attributed to what, how much and where children eat and decreased physical activity due to design of the environment where children live (National Academies, 2005). The nutrition environment is widely believed to contribute to the epidemic of childhood obesity in the U.S. and globally (Glanz et al., 2005) by influencing what and how much children eat. An environment impacting 95% of all youth nationwide (National Center for Education Statistics, 2005) is the school environment.

Two-thirds of Americans believe schools should play a major role in addressing the problem of obesity in the United States (Harvard Health Policy Forum, 2003). Next to home, school is the most influential environment of young people. Students consume as many as 50% of their daily calories at school (Mathematica Policy Research, Inc., 2001). Besides school meals programs (breakfast and lunch) these calories are derived from other competitive sources of food and beverages including a la carte, vending, bake sales, and foods brought from home. Ninety percent of parents and teachers believe “more healthy snacks and beverages should be available in school vending machines and on a la carte lines” (Kubik et al., 2005a). The presence of high-calorie, high-fat, low nutrient foods in environments perceived as credible and beneficial to good health convey very mixed messages to youth in terms of requirements for healthy living.

Nationwide 43% of elementary schools, 74% of middle schools and 98% of high schools have vending machines, school stores, or snack bars (Wechsler et al., 2001). Vending machine prevalence nearly doubled in middle schools between 1991-92 and 2004-05 (42% to 82%); high schools increased from 76% to 97% during the same time frame (Gordon & Fox, 2007). An

increase in body mass index (BMI) has been linked to food practices/policies (i.e. competitive foods) permitted in the school (Kubik et al., 2005b).

In Iowa, a survey of all schools participating in the USDA school lunch program (N=371; Litchfield et al., 2006) found that 87% of high schools, 76% of middle schools, and 20% of elementary schools had vending. Beverage vending, including flavored drinks, carbonated beverages, and water was present in 76% of high schools, 52% of middle schools, and 10% of elementary schools. In elementary schools, where vending was least prevalent, carbonated beverages were offered four times more frequently (N=44) than dairy products (N=11). Prior to the implementation of federally mandated school wellness policies, the presence of high-calorie, high-fat, low nutrient foods in competitive food venues in Iowa schools was consistent with the national data. Although this trend may be changing, Iowa schools would benefit from state level guidance.

## **Background**

Currently, limited regulations for competitive foods exist at the Federal level. USDA regulations define competitive foods and food of minimal nutritional value. Federal regulations prohibit the sale of foods of minimal nutritional value in the food service areas during meal periods (breakfast and lunch). The sale of other competitive foods may, at the discretion of the State Agency and the Local Education Agency, be allowed in the food service area (cafeteria) during the meal period. Foods of minimal nutritional value as defined in the Federal USDA regulations fall into four general categories: soda water, water ices, chewing gum, and certain candies (hard candy, jellies and gums, marshmallow candies, fondant, licorice, gum, candy, candy coated popcorn). Sales outside the food service area (cafeteria) and at other than meal times do not currently fall under Federal regulations.

The Richard B. Russell National School Lunch Act (42 U.S.C. 1751-Section 204) requires local educational agencies participating in the program to establish, not later than the first day of the school year beginning after June 30, 2006, a local wellness policy. The law requires the wellness policy to include among other things: 1) goals for nutrition education, physical activity, and other school-based activities that are designed to promote student wellness; 2) nutrition guidelines selected by the local educational agency for all foods available on each school campus during the school day; 3) assurance that guidelines for reimbursable meals are not less stringent than Federal regulations and guidance; 4) a plan for measuring implementation; and 5) involvement of parents, students, school food authority, school board, school administrators, and the public.

The nutrition guidelines required as part of the school wellness policy are at the discretion of the local school district. Review of policies and practices [Team Nutrition Demonstration Project (TNDP)] relative to the nutrition guidelines required by the Federal mandate has revealed that many Iowa school districts are struggling with the development and implementation of these policies. Some states (N=22) have taken the burden off the local school districts and passed legislation regulating the types of foods, portion sizes, and times at which they can be sold (CSPI, 2007; Levi, et al., 2007).

Local educational agencies may find parts of the new nutrition standards developed by the Nutrition Advisory Panel (Panel) more restrictive or less restrictive than existing local policy. The Panel does not recommend that local school districts with more restrictive policies make changes. Further, the nutrition standards proposed by the Panel in many cases have phase-in provisions. The intent of phase-in provisions is to give school districts time to adjust the types of

foods sold and to give time for the food industry to adapt formulations. In addition, the Panel felt that certain aspects of the standards were best left for full implementation at the local level and only made recommendations that nutrition standards apply to foods brought from home (i.e. classroom parties or celebrations).

### **Goals of Establishing Nutrition Standards**

The Nutrition Advisory Panel discussions and recommendations for foods sold or provided in school have been shaped by goals that were agreed upon at the outset.

#### **School Nutrition Environment**

The Panel believes that schools have a responsibility to provide an environment that supports and encourages healthy eating. The Panel is mindful that the recommended energy intakes for children and youth do not offer much room for foods that do not fit into the USDA daily meal patterns. Accordingly, the Panel has recommended nutritional standards that would **maximize availability of foods of high nutrient density**.

The nutritional standards also play an educational function by modeling healthy food choices. Students will have the opportunity to select from a variety of healthy foods and will be guided toward the **development of healthy eating habits**.

#### **Healthy Children and Healthy Families**

Food choices have a profound **influence on health, both in the short and long run**. The Panel expects that implementation of the nutritional standards will contribute to childrens' health now and during their entire life.

Students' choices in school may influence **their families' food purchasing decisions** as well.

The Panel expects that the influence of the nutritional standards will be especially large for those students who get the majority of their calories from food they consume in school.

### **Recommendations of the Panel**

Although the law allows the Nutrition Advisory Panel to submit to the state board recommendations related to the Federal school food program, as long as the recommendations exceed existing USDA Federal guidelines, the Panel opted not to make recommendations in this area at this time. This decision was made because the Institute of Medicine (IOM) is currently examining the literature and exploring ways to implement the 2005 Dietary Guidelines for Americans through the school meals program. It is anticipated that new recommendations will be provided to USDA in approximately one year. Because the Iowa law calls for the Nutrition Advisory Panel to be convened every five years to review new recommendations and potentially make recommendations for changes as appropriate, compliance with the anticipated new Federal rules can be addressed at that time.

The Nutrition Advisory Panel identified and reviewed a number of resources that aided in developing standards for food and beverages sold or provided on the school grounds during the school day. Key materials reviewed included the 2007 Institute of Medicine Report: *Nutrition Standards for Healthy Schools: Leading the Way Toward Healthier Youth*; the USDA *HealthierUS School Challenge*; the *National School Beverage Guidelines* developed with the

Alliance for a Healthier Generation – a joint initiative of the American Heart Association and the William J. Clinton Foundation; the Iowa Association of School Boards Sample School Wellness Policy recommendations; School Nutrition Association – National Nutrition Standards Recommendations and Guiding Principles; and the National Automatic Merchandising Association (NAMA) nutrition standards, ‘Fit Pick’. In addition, the Panel reviewed standards and recommendations from a number of other states including Arizona, Connecticut, California, Tennessee, and Kansas.

In developing the recommendations, the Panel established the following definitions:

***School Day:*** – for the purposes of food standards, the school day includes the time from one hour prior to classes beginning until one hour after classes are completed. If a formal event begins on the property within one hour of the last bell ringing, the school day ends at the time the formal event begins. Formal events include basketball games and similar athletic events, and band or other music concerts that might have a concession stand (exempt per the law). The nutrition standards apply during the school day.

***Fundraising:*** – Defined as periodic sales, typically outside of the school day and outside of the school setting, where the buyer is aware that the proceeds will be used to support a specific cause. Fundraising is exempt from the standards per the law. However, the Panel determined that if fundraising involves the sale of food and occurs during the school day, it needs to meet the nutrition standards.

<b>Nutrient</b>	<b>A la carte Entrees and sides</b>	<b>Vending/ Fundraising</b>	<b>Beverages</b>
Calories	$\leq$ NSLP entree items <sup>1</sup> OR $\leq$ 400 calories  NSLP sides $\leq$ 200 calories <sup>1</sup>	$\leq$ 200 calories	<b>Water</b> without flavoring, additives, carbonation or nutritive or non- nutritive sweeteners
Total fat	$\leq$ 35% calories (excluding nuts, seeds, peanut butter and reduced fat cheese)	$\leq$ 35% calories (excluding nuts, seeds, peanut butter and reduced fat cheese)	<b>Milk – – 8 oz<sup>2</sup></b> Low/nonfat regular (now) Low/nonfat flavored no non- nutritive sweeteners(now) In addition: $\leq$ 27 gm sugar/8 oz (2014) $\leq$ 24 gm sugar/8 oz (2017) $\leq$ 22 gm sugar/8 oz (2020)
Saturated fat	$\leq$ 10% calories (excluding reduced fat cheese)	$\leq$ 10% calories (excluding reduced fat cheese)	<b>100% Fruit/Vegetable Juice –</b> No added sweeteners 4 oz elementary 10 oz MS/HS (now) 8 oz MS/HS (2014)
Trans fat	$\leq$ 0.5 gm/serving	$\leq$ 0.5 gm/serving	<b>Sports drinks, Flavored or Carbonated Waters or other Beverages</b> Not available during time/situations where standards apply
Sugar	$\leq$ 35% calories (excluding fruits and yogurt $\leq$ 30 gm/8 oz)	$\leq$ 35% calories (excluding fruits and yogurt $\leq$ 30 gm/8 oz)	
Sodium	$\leq$ 600 mg/serving entrees (present) $\leq$ 480 mg/serving entrees (2014)  $\leq$ 400 mg/serving sides $\leq$ 200 mg/serving sides (2014)	$\leq$ 400 mg/serving (present) $\leq$ 200 mg/serving (2014)	

Dietary fiber/whole grain	50% of grains offered provide 2 gm dietary fiber/serving	50% of grains offered are whole grain OR provide 2 gm fiber/serving	<i>Note: Beverages are caffeine free with the exception of trace amounts of naturally occurring caffeine-related substances (chocolate milk).</i>
	At least two fruits and/or non-fried vegetables offered with no more than one being a juice option	At least two fruits and/or non-fried vegetables offered with no more than one being a juice option	

<sup>1</sup> NSLP menu items offered in the same portion size and frequency per week as they appear on the NSLP menu.

<sup>2</sup> Milk portion size - 8 oz Elementary and Middle School; - 8 oz must be available at High School and up to 16 oz may also be available.

#### Rationale for Foods

- Calories –
  - Main entrée: The energy needs for 9-18 year old range from 1600 to 2800 calories according to the Dietary Guidelines for Americans. The midpoint of this calorie range is 2200 calories per day. One-third of this daily energy requirement is 733 calories (per meal). Current school lunch guidelines energy allowance for lunch is 825 calories. Thus, a target of 800 calories for the lunch meal was used. Lunch was considered 1 entrée and 2 side items. Figuring 2 side items @ 200 calories leaves 400 calories for the main entrée. (Arizona and California also use 400 calorie limit.)
  - Side items: The 200 calorie limit for side items is consistent with the HealthierUS Challenge, Institute of Medicine, and School Nutrition Association guidelines.
- Total fat, saturated fat, and trans fat –
  - Recommendations are consistent with the HealthierUS Challenge, Institute of Medicine, Iowa Association of School Boards sample policy and School Nutrition Association guidelines.
- Sugar –
  - Sugar recommendations are consistent with the HealthierUS Challenge, Institute of Medicine, Iowa Association of School Boards sample policy and School Nutrition Association guidelines.
- Sodium –
  - Sodium recommendations are consistent with the HealthierUS Challenge, Institute of Medicine, Iowa Association of School Boards sample policy and School Nutrition Association guidelines. A phase-in approach for sodium guidelines is recommended due to market limitations. An inventory of 1200 snacks and beverages found only 8 snack items meeting the 200 mg sodium guideline; school food service representatives also reported limited options

to meet the sodium guidelines. For industry to respond, develop, and inventory lower sodium products will take time; thus the phase-in approach.

- Dietary fiber/whole-grain –
  - The fiber/whole-grain recommendation is consistent with the Dietary Guidelines for Americans recommendation, “one-half of grains consumed as whole grains.” Two grams of dietary fiber per slice (ounce) of bread is a common marker of whole grain.

#### Rationale for Beverages

- There was considerable and lengthy discussion about beverage guidelines. The final consensus of the Panel was that only beverages contributing nutritional value to the overall diet should be included. These beverages include water, 100% fruit and vegetable juices, and milk. This recommendation is consistent with the School Nutrition Association standards for elementary and middle schools, HealthierUS Challenge, and Institute of Medicine. It differs from the Iowa Association of School Boards in that it requires 100% fruit and vegetable juices rather than 50% fruit and vegetable juices. The National School Beverage Guidelines developed with the Alliance for a Healthier Generation (AHG) and the American Heart Association, closely matches the Panel’s recommendations with the exception of no or low calorie beverages and sports drinks offered in high schools. The National Automatic Merchandising Association (NAMA) also supports the National School Beverage guidelines through their “Fit Pick” program. The Panel acknowledges industry efforts to help combat childhood obesity and believes these guidelines are a good start in implementing a phased-in approach to our “Best In Class” nutrition recommendations.
- Portion sizes reflect those recommended by Dietary Guidelines for Americans/MyPyramid. They were modified slightly from the American Beverage Association, HealthierUS Challenge, Institute of Medicine, and School Nutrition Association guidelines in consideration of product availability. A phased-in approach for portion sizes is recommended; industry has recently changed portion sizes and will require time for additional changes.
- Non-nutritive sweeteners are not allowed in any of the beverages. This is in line with the Institute of Medicine report, which documents: 1) Uncertainty about long-term use and low-level exposure on health and development in children; 2) Displacement of nutrient dense beverages; and 3) Lack of efficacy of non-nutritive sweeteners in weight control.
- There was lengthy discussion about the role of flavored milk in the overall diet. Consensus of the Panel was that flavored milk should be included because of its nutrient density (protein, Vitamins A and D, calcium) as calcium deficiency exists in the diets of children and adolescents. However, the group also agreed that flavored milk should not be excessive in added sugars. The flavored milk recommendations are consistent with the Institute of Medicine guidelines, but with a phase-in approach. Currently, there are no flavored milks available from vendors that meet the Institute of Medicine guidelines.

## **Other Comments**

It is the recommendation of the Nutrition Advisory Panel that local school districts establish as part of their school wellness policy guidelines that apply to food items brought from home or provided at no cost by the teacher or school to students. These guidelines may suggest that these foods comply with the nutrition standards for food sold in the school during the school day. It is also recommended that staff in the school system act as positive role models for the students by adhering to the nutritional standards during the school day.

Providing healthy snacks for children helps them develop life-long healthy eating patterns. The following snack guidelines are encouraged:

- **Snacks** (classroom parties, birthday treats, etc.)  
Snacks served during the school day should make a positive contribution to the child's diet. Emphasis should be placed on serving fruits and vegetables as the primary snack and water, milk, fruit juice or vegetable juice as the primary beverage.

*Suggestions for healthy snacks for the classroom:*

Carrot sticks  
Celery sticks  
Apples  
Bananas  
Grapes  
Raisins  
Craisins  
Dried fruit  
Vegetable chips  
Applesauce or fruit cups

*Suggestions for healthy beverages for the classroom:*

Water  
Low-fat or fat-free milk  
4 - 6 oz 100% fruit juice  
4 - 6 oz. 100% vegetable juice

- **Rewards**  
It is the recommendation of the Panel that food and beverages not be used as rewards; however, if food is served as a reward during the school day it should meet the nutritional standards.

The Nutrition Advisory Panel also recommends the following:

- Non-school groups providing or selling food in the school, outside of the school day, should be provided a copy of the nutrition standards and be encouraged to follow them to the extent possible.
- School related organizations conducting fundraisers or operating concession stands should be provided a copy of the nutritional standards and be encouraged to follow them to the extent possible and as a minimum offer at least some food items consistent with the standards and/or sell non-food items as fundraisers.



- It is recommended that teachers be provided a copy of the policy and be reminded of the potential impact they have as role models. Recommended nutrition standards should be taken into account as decisions are made on food to be sold or provided in the teachers' lounge and/or consumed in front of students.

The Nutrition Advisory Panel has also identified key elements and support necessary for successful implementation of these nutritional standards including:

Communication – The Panel recommends that clear, easy to understand communications are provided to school nutrition stakeholders. They should describe:

- 1) What the Healthy Kids Act is,
- 2) Why nutritional standards for Iowa were developed,
- 3) What the standards are, and
- 4) How establishing healthy eating habits impacts student's health, learning aptitude, and creates a long-term benefit to Iowa's citizens.

Messages should be developed to address specific stakeholder information needs (i.e. vendors, school food service, parents, teachers, school administrators, students, etc.) The plan should be simple and easy to reproduce (in black ink only or in multiple colors), include a graphic symbol or logo connecting the communication pieces to the Iowa Healthy Kids Act and provide tips to school personnel about how to implement the standards. They should also communicate the need to reinforce the messaging frequently in the first years of implementation.

**Timeline: Communication needs to occur before and during program implementation.**

Nutrient Analysis – The Panel acknowledges that food service industry stakeholders have nutrient analysis of their products and that this information is readily available upon request and/or via internet research. The Panel recommends that food service industry stakeholders be engaged in a conversation about the new standards far in advance of implementation. We encourage the formation of a centralized clearinghouse of information that includes nutrient analysis information that is easy for schools to access. Food service industry stakeholders can play a key role in providing technical assistance in this way. State government's role to facilitate easy access to this information may be as simple as providing Internet 'links' to industry nutrient information from a 'Healthy Kids Act – School Nutrition Standards' web-page.

**Timeline: Food service industry stakeholders and state government need to create a nutrient analysis clearinghouse of information prior to program implementation and with ongoing support.**

Schools Buying Local – The Panel encourages schools to apply a geographic preference when procuring unprocessed, locally grown, or locally raised Iowa agricultural products as specified by the Food, Conservation and Energy Act of 2008 (P.L. 110-246). The act applies to procurements in the Child Nutrition Programs and pertains to operators of the National School Lunch Program, School Breakfast Program, Fresh Fruit and Vegetable Program, Special Milk Program, Child and Adult Care Food Program and Summer Food Service Program as a well as to purchases of fresh produce for these programs by the Department of Defense. (*See attached*

*USDA Memo “Applying Geographic Preference in Procurements for the Child Nutrition Programs.”)*

**Timeline: Schools will provide ongoing support of buying local when possible.**

Funding for Food Service – Iowa food service directors, kitchen managers, and other administrators responsible for procuring school food, equipment, labor, and supplies frequently rely on revenue generated from a la carte sales to help meet costs and subsidize the cost of school meals. Revenue from a la carte sales can easily be up to twenty-five percent of a district’s revenue stream. The current rate of Iowa’s state reimbursement is 4¢ for lunch and 3¢ for breakfast. Unfortunately, this rate of reimbursement has not increased in over twenty years and, for the 2007-08 school year, ran out in April.

The nutrition standards will likely impact the revenue school food services derive from a la carte sales. Therefore, funding alternatives will need to be identified to make up both for the potential shortfall in food service revenue and state subsidies for school meals.

**Timeline: The Iowa Legislature will need to discuss and/or craft legislation to address the shortfall of funding to support school nutrition programs identified by this diverse group of stakeholders prior to program implementation.**

Funding for Farm to School – The Panel supports the goals of the Iowa Farm to School program and encourages the Iowa Legislature to continue appropriating funds to this program, emphasizing that public/private partnerships must be established to ensure long-term program sustainability.

**Timeline: The Iowa Legislature should provide ongoing support of the Iowa Farm to School program.**

Monitoring – The Panel believes that, for the nutritional standards to be monitored effectively and thoroughly, additional funds need to be appropriated to the ultimate entity responsible for regulatory compliance. The Panel recommends amending the Iowa school’s “Site Application Form” to include questions that pertain to implementation of the new nutrition standards so that schools may self-report. If schools have not implemented the guidance, they should be provided with the opportunity to state why and describe how they will work toward meeting the guidance in the future.

The Panel also believes that food service industry stakeholders can play a critical and important role as technical resource providers assisting with standard monitoring. Sales data for all vendors and distributors can easily be polled and cross-checked to ensure the products being purchased meet the nutritional content needs set forth by the state’s guidance.

**Timeline: The Department of Education will engage food service industry stakeholders re: compliance monitoring prior to program implementation.**

**Healthy Kids Act Nutrition Advisory Panel Members 2008**

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Kirk Tyler	Representing: Grocery Industry Association President, Atlantic Coca-Cola Bottle Company
Marge Carson	Representing: Accredited Nonpublic School Director Food Services, Xavier High School, Cedar Rapids
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Christine Pardee	Representing: Farm-to-School Council Farm to School Council Member
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